

- I.1) reacting, in a liquid phase (IB),
 - I. 1. 1) at least one polyelectrolyte selected from the group consisting of polymeric and[/or] oligomeric, organic, anionic polyelectrolytes (IC) with at least one compound selected from the group consisting of polymeric and[/or] oligomeric, organic, cationic polyelectrolytes (ID) and cationic surfactants(IE) [or]
 - I. 1. 2) at least one polyelectrolyte selected from the group consisting of polymeric and oligomeric, organic, cationic polyelectrolytes (ID) with at least one anionic surfactant (IF)
 - in a stoichiometric or non-stoichiometric ratio, to form liquid phase (1G),
 - I. 2) pouring the resulting liquid phase (1G) onto a substrate or into a mold and
 - I.3) allowing it to solidify, and
 - I.4) heat-treating the resulting solid (IH); and
- (II) at least one three-dimensionally crosslinked coating layer (IIA) formed by
- (II.1) applying to coating layer (1A) at least one aqueous, thermally curable coating material (IIB) comprising
 - II.I.1) at least one binder (IIC) and
 - II.I.2) at least one crosslinking agent (IID),
 - and
 - II.2) thermally curing the resulting wet film (IIE).

Please substitute for claim 2.

2. (Amended) A process for producing multicoat systems, comprising applying at least two coating constituents one over the other and curing after each application, comprising
- (I) preparing at least one constituent (IA) comprising mesomorphic polyelectrolyte complexes selected from I.1.1 and I.1.2, prepared by
 - I.1) reacting, in a liquid phase (IB),
 - I.1.1) at least one polyelectrolyte selected from the group consisting of polymeric and oligomeric, organic, anionic polyelectrolytes (IC) with at least one

compound selected from polymeric and[/or] oligomeric, organic, cationic polyelectrolytes (ID) and cationic surfactants (IE)

and

I.1.2) at least one polyelectrolyte selected from the group consisting of polymeric and oligomeric, organic, cationic polyelectrolytes (ID) with at least one anionic surfactant (IF)

in a stoichiometric or non-stoichiometric ratio, to form a liquid phase (1G),

I.2) pouring the resulting liquid phase (IG) onto a substrate or into a mold, and

I.3) allowing it to solidify, and

I.4) heat-treating the resulting solid (IH); and then, on the resulting constituent (IA),

(II) forming at least one coating layer (IIA) which is three-dimensionally crosslinked by

II.1) applying to the surface of the constituent (1A) at least one aqueous, thermally curable coating material (IIB) comprising

II.1.1) at least one binder (IIC) and

and

II.2) thermally curing the resulting wet film (IIE).

Please substitute for claim 3.

3. (Amended) A reactive system comprising

(I) at least one constituent (IA) comprising at least one mesomorphic polyelectrolyte complex selected from 1.1.1 and 1.1.2, comprising

I.1.1) at least one polyelectrolyte selected from the group consisting of polymeric and oligomeric, organic, anionic polyelectrolytes (IC) and at least one compound selected from the group consisting of polymeric and oligomeric, organic, cationic polyelectrolytes (ID) and cationic surfactants (IE)

and

I.1.2) at least one polyelectrolyte selected from the group consisting of polymeric and oligomeric, organic, cationic polyelectrolytes (ID) and at least one anionic surfactant (IF)

and also

- (II) at least one aqueous, thermally curable coating material (IIB) comprising
 - II.I.1) at least one binder (IIC) and
 - II. 1. 2) at least one crosslinking agent (IID)

Please substitute for claim 4.

4. (Amended) The multicoat system as claimed in claim 1, wherein the mesomorphic polyelectrolyte complexes produced in liquid phase (B), are purified by repeated precipitation from a solution and redissolution.

Please substitute for claim 5.

5. (Amended) The multicoat system as claimed in claim 1 wherein polyelectrolytes (IC) and (ID) selected are those whose polymer chains (IC) and (ID), viewed independently, would not be compatible but would instead separate again in the solid phase.

Please substitute for claim 6.

6. (Amended) The multicoat system as claimed in claim 1, wherein the solid (IH) is heat-treated for from 1 minute to 10 hours.

Please substitute for claim 7.

7. (Amended) The multicoat system as claimed in claim 1, wherein the solid (IH) is heat-treated at temperatures between 80 and 3000C.

Please substitute for claim 8.

8. (Amended) The multicoat system as claimed in claim 1 or the process of claim 2 or the reactive system of claim 3, wherein the constituent (IA) , comprises additives (J), selected from the group consisting of polymers crosslinkers, crosslinking catalysts, initiators, photoinitiators, pigments, dyes, fillers, reinforcing fillers, rheological assistants, wetting agents, dispersants, defoamers, adhesion promoters, additives for improving substrate wetting,

additives for improving surface smoothness, dulling agents, leveling agents, film-forming auxiliaries, driers, antiskinning agents, light stabilizers, corrosion inhibitors, biocides, flame retardants, polymerization inhibitors, photoinhibitors, plasticizers and mixtures thereof.

Please substitute for claim 9.

9. (Amended) The multicoat system as claimed in claim 1, or the process for producing it as claimed in claim 2, or the reactive system as claimed in claim 3, wherein the coat (IIA) comprises constituents which are curable with actinic light, including UV radiation and electron beams.

Please substitute for claim 12.

12. (Amended) An article selected from the group consisting of automobile, coil or furniture, comprising at least one multicoat system as claimed in claim 1.

Please insert the following new claims:

13. (New) The process of claim 2, wherein the mesomorphic polyelectrolyte complexes produced in liquid phase (B), are purified by repeated precipitation from a solution and redissolution.

14. (New) The reactive system of claim 3, wherein the mesomorphic polyelectrolyte complexes produced in liquid phase (B), are purified by repeated precipitation from a solution and redissolution.

15.(New) The multicoat system of claim 1, wherein the mesomorphic polyelectrolyte complex precursors are purified by repeated precipitation from a solution and redissolution.

16. (New) The process of claim 2, wherein the mesomorphic polyelectrolyte complex precursors are purified by repeated precipitation from a solution and

redissolution.

17. (New) The reactive system as claimed in claim 3, wherein the mesomorphic polyelectrolyte complex precursors are purified by repeated precipitation from a solution and redissolution.

18. (New) The process as claimed in claim 2 wherein polyelectrolytes (IC) and (ID) selected are those whose polymer chains (IC) and (ID), viewed independently, would not be compatible but would instead separate again in the solid phase.

19. (New) The reactive system as claimed in claim 3 wherein polyelectrolytes (IC) and (ID) selected are those whose polymer chains (IC) and (ID), viewed independently, would not be compatible but would instead separate again in the solid phase.

20. (New) The process as claimed in claims 2 wherein the solid (IH) is heat-treated for from 1 minute to 10 hours.

21. (New) The process as claimed in claim 2 wherein the solid (IH) is heat-treated at temperatures between 80 and 3000C.

22. (New) The multicoat system of claim 1 or the process of claim 2, or the reactive system of claim 3, wherein the coat (IIA) comprises additives (J), selected from the group consisting of polymers, crosslinkers, crosslinking catalysts, initiators, photoinitiators, pigments, dyes, fillers, reinforcing fillers, rheological assistants, wetting agents, dispersants, defoamers, adhesion promoters, additives for improving substrate wetting, additives for improving surface smoothness, dulling agents, leveling agents, film-forming auxiliaries, driers, antiskinning agents, light stabilizers, corrosion inhibitors, biocides, flame

retardants, polymerization inhibitors, photoinhibitors, plasticizers and mixtures thereof.

23. (New) The multicoat system of claim 1 or the process of claim 2, or the reactive system of claim 3, wherein the aqueous, thermally curable coating materials (IIB) comprise additives (J), selected from the group consisting of polymers, crosslinkers, crosslinking catalysts, initiators, photoinitiators, pigments, dyes, fillers, reinforcing fillers, rheological assistants, wetting agents, dispersants, defoamers, adhesion promoters, additives for improving substrate wetting, additives for improving surface smoothness, dulling agents, leveling agents, film-forming auxiliaries, driers, antiskinning agents, light stabilizers, corrosion inhibitors, biocides, flame retardants, polymerization inhibitors, photoinhibitors, plasticizers and mixtures thereof.

24. (New) The multicoat system as claimed in claim 1, or the process for producing it as claimed in claim 2, or the reactive system as claimed in claim 3, wherein the aqueous, thermally curable coating materials (IIB)] comprise constituents which are curable with actinic light, especially UV radiation, and electron beams.

25. (New) A shaped part or laminate produced with the multicoat system of claim 1.

26. (New) A coating selected from the group consisting of automotive OEM, refinish coatings, industrial coatings, coil coatings and furniture coatings, comprising the multilayer system of claim 1.

27. (New) An article, selected from the group consisting of automobiles, coil or furniture, comprising at least one multicoat system produced with the process as claimed in claim 2.

PL as cancel claims 10 and 11 without prejudic .